

# HOWTO: LAS Standalone

This step-by-step guide details the procedure for installing LAS in basic configuration, serving sample datasets using Ferret.

It is highly recommended you become familiar with LAS by reading all related material on the LAS website <http://ferret.pmel.noaa.gov/Ferret/LAS>. In particular, verify that your target platform meets all prerequisites as listed in the Documentation section.

1. From the Downloads section of the LAS website, download the latest version of LAS:

[ftp://ferret.pmel.noaa.gov/pub/las/las\\_6\\_5\\_2\\_1.tar.gz](ftp://ferret.pmel.noaa.gov/pub/las/las_6_5_2_1.tar.gz)

Please note that this guide was tested with 6.5.2.1 version of LAS, the latest version at the time.

2. Unzip and untar the downloaded file. The archive expands into a subdirectory named "las":

```
gunzip las_6_5_2_1.tar.gz
tar -xf las_6_5_2_1.tar
```

3. As superuser, run the configuration script from the installation directory:

```
su
cd las
./configure
```

Enter location of Perl:

Location of perl executable []:

The script will identify any Perl modules that are missing in your installation. If prompted, allow the script to install the missing modules:

The following Perl modules haven't been installed:

URI

Do you want to build these modules (this can take up to thirty minutes)? [yes] yes

Enter locations of other required software:

Location of ferret executable []:

Location of java executable []:

Use the Tomcat Server provided by LAS:

Would you like to use a different Tomcat installation for LAS? [no] no

Accept the default Tomcat ports:

Use the following Tomcat ports [8080, 8005, 8008]? [yes] yes

Use the current machine as the Tomcat Server:

Enter the full domain name of the Tomcat Server (do not include the port number): [] kanga.llnl.gov

Use the current machine as the MySQL server:

Enter name of mysql host : [] kanga.llnl.gov

```
MySQL account name: [root]
Enter password: []
```

Use the Apache HTTP Server port as the web server. The port number is the value given with the "Listen" directive in the configuration file httpd.conf:

```
Enter the full domain name of the Web Server (including port
number if non standard): [] kanga.llnl.gov:80
```

Keep things simple and don't use proxy:

```
Do you plan to use a proxy pass or connector from the HTTP
server to the tomcat server (recommended; instructions below): [yes] no
```

If desired, the script can check compatibility of your web server:

```
If the Web server is running, I can make sure that it is a server
supported by LAS.
Is the server running? [yes] no
```

Accept the default web client settings:

```
Enter path name for LAS: [/las]
Enter path name for the LAS server: [/las-bin]
Enter path name for the LAS server output: [/las-output]
```

The server can have a title:

```
Enter a title for the LAS server: [] mylasserver
```

Enter administrator email address:

```
Enter a blank separated list of email address(es): [] boss@llnl.gov
```

Install the sample datasets:

```
You can set the server up to use the sample COADS climatology and Levitus
climatology datasets that are distributed with Ferret.
Do you want to do this? [yes] yes
```

Use "daemon" as the group name of your web server:

```
Group name? [nobody] daemon
```

4. Edit your Apache HTTP Server configuration file httpd.conf .

Apply a set of directives to two locations in your LAS installation (replace ".../" with the absolute path to your installation):

```
<Directory ".../las/server">
    AllowOverride None
    Options None
    Order allow,deny
    Allow from all
</Directory>
<Directory ".../las/las_servlet/jakarta/webapps">
    AllowOverride None
    Options None
    Order allow,deny
```

```
    Allow from all
</Directory>
```

Add two aliases (again, replace "/.../" with a path to your installation):

```
ScriptAlias /las-bin/ /.../las/server/
Alias /las-output/ /.../las/server/output/
```

**5. Start Apache HTTP Server and LAS:**

```
apachectl start
./startserver.sh
```

You should now be able to go to <http://localhost:8080/las/servlets/datasets> and browse the LAS user interface.